



**Fw: Ethylene Glycol**  
**Christy Warren** to: Stevie Wilding  
Cc: Rick McMillin, David Neleigh

03/02/2012 09:21 AM

From: Christy Warren/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US,  
Cc: Rick McMillin/R6/USEPA/US@EPA, David Neleigh/R6/USEPA/US@EPA  
History: This message has been replied to.

Stevie,

Just a couple more questions so I can get these samples scheduled. Is the site name Dimrock? And what program is this work under?

Christy Warren  
U.S. EPA Region 6 Laboratory  
Sample Control Center  
10625 Fallstone Road  
Houston, Texas 77099  
warren.christy@epa.gov  
Office: 281-983-2137  
Cell: 713-805-7157  
Fax: 281-983-2248

----- Forwarded by Christy Warren/R6/USEPA/US on 03/02/2012 08:17 AM -----

From: Rick McMillin/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US  
Cc: Christy Warren/R6/USEPA/US@EPA, David Neleigh/R6/USEPA/US@EPA  
Date: 03/02/2012 07:56 AM  
Subject: Re: Ethylene Glycol

Stevie,

We got a good curve shot from 0.5 to 200 ppm. The propylene glycol is good fit with average response (10%RSD) using all 10 points and the ethylene glycol is 0.999 quadratic fit 0.5-100 ppm using 9 points. We will shoot 7 reps at 1ppm to verify MDL and we should be good to go.

When we did this for Gulf Oil Spill we called the method a modified 8270 because it is using GC/MS, but I suppose it could be called a modified 8015 if needed.

The sample collection and turnaround times should be fine for us.

Who do we send results to and what format? We can create SEDD 2a if needed, but we normally generate a PDF and a simple Excel file.

Christy Warren [(281)983-2137] will be the point of contact on scheduling and receiving samples and sending out the reports.

Ken Stevens is setting the method up, but it could be either Ken or Nick Gannon doing the analysis.

Rick McMillin  
Deputy Branch Chief  
Region 6 Houston Lab  
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f: 281-983-2124  
c: 832-443-4568  
c2: 281-415-6819

Stevie Wilding Per sample -- there will be two vials. For MS/MSD -- I will request 6 vials. E... 03/01/2012 04:48:05 PM

From: Stevie Wilding/ESC/R3/USEPA/US  
To: Rick McMillin/R6/USEPA/US@EPA  
Date: 03/01/2012 04:48 PM  
Subject: Re: Ethylene Glycol

Per sample -- there will be two vials. For MS/MSD -- I will request 6 vials.

Each house will have two samples taken (not actually duplicates -- due to treatment systems, so one sample is before treatment and one is after.)

So a total of 2 samples per house which equates to 4 vials per house

Is this clear as mud?

Rick McMillin I think this will be fine. Everyone has gone home so I will double check in the... 03/01/2012 05:33:29 PM

From: Rick McMillin/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US  
Date: 03/01/2012 05:33 PM  
Subject: Re: Ethylene Glycol

I think this will be fine. Everyone has gone home so I will double check in the morning. I still need to see how the curve and MDL work went, but I'm confident all is well. I assume you are saying two VOA vials per sample location (duplicates), or 4 VOA vials total per house (two at pump and two in house).

Rick McMillin  
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Stevie Wilding Rick, The samplers have sent two 40 mL VOA vials to the lab. Is that enough... 03/01/2012 12:29:58 PM

From: Stevie Wilding/ESC/R3/USEPA/US  
To: Rick McMillin/R6/USEPA/US@EPA  
Cc: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Jennifer Gundersen/ESC/R3/USEPA/US@EPA, Christy Warren/R6/USEPA/US@EPA  
Date: 03/01/2012 12:29 PM  
Subject: Re: Ethylene Glycol

Rick,

The samplers have sent two 40 mL VOA vials to the lab. Is that enough volume for you -- we can request more.

Do you need a formal written request? Four homes will be sampled next week. Each home will be two samples (at pump and in house) and then blanks each day -- so a total of 10 samples. If you have hits -- draft results would be great and final results are a 21 day TAT.

HW-56	3/5/2012 1:30
HW-60	3/5/2012 8:30
HW-62	3/6/2012 8:30
HW-61	3/6/2013 1:30

I will provide the following address to the samplers.

Christy Warren  
U.S. EPA Region 6 Laboratory  
Sample Control Center  
10625 Fallstone Road  
Houston, Texas 77099  
281-983-2137

Thanks, Stevie

Rick McMillin Great. Our 50ppm standard from last night looks very good, so we are shooti... 03/01/2012 09:20:49 AM

From: Rick McMillin/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US  
Cc: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Jennifer Gundersen/ESC/R3/USEPA/US@EPA, Christy Warren/R6/USEPA/US@EPA  
Date: 03/01/2012 09:20 AM  
Subject: Re: Ethylene Glycol

Great. Our 50ppm standard from last night looks very good, so we are shooting a curve today from 0.5-10 ppm. If that looks good we will look at MDLs and should be ready to go. What size/kind of samples are usually sent for this test?

Rick McMillin  
Deputy Branch Chief  
Region 6 Houston Lab  
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Stevie Wilding Rick, Perfect -- I intended to call you today to clarify my request. These are t... 03/01/2012 07:23:42 AM

From: Stevie Wilding/ESC/R3/USEPA/US  
To: Rick McMillin/R6/USEPA/US@EPA  
Cc: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Jennifer Gundersen/ESC/R3/USEPA/US@EPA, Christy Warren/R6/USEPA/US@EPA  
Date: 03/01/2012 07:23 AM  
Subject: Re: Ethylene Glycol

Rick,

Perfect -- I intended to call you today to clarify my request. These are the two compounds we are unable to do.

Rick McMillin Stevie, I'm being told we can't do the list in your table at this time. 02/29/2012 05:18:14 PM

From: Rick McMillin/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US  
Cc: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Jennifer Gundersen/ESC/R3/USEPA/US@EPA, Christy Warren/R6/USEPA/US@EPA  
Date: 02/29/2012 05:18 PM  
Subject: Re: Ethylene Glycol

Stevie,

I'm being told we can't do the list in your table at this time.

We should be able to do ethylene glycol and propylene glycol by GC/MS direct injection on a wax column like we did for the Gulf Oil Spill. However we have had troubles with our instrument that we are using so it has taken longer than expected. A standard is running now, so we should know more by morning. I think we should be able to achieve similar detection limits as the contractor lab did, but we are using a MS instead of an FID, so we might not be able to go quite as low. Hopefully we will know tomorrow.

Rick McMillin  
Deputy Branch Chief  
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Stevie WildingRick, This is great. Right now we have an ethylene glycol RLs at 10 ppm with...02/29/2012 10:28:29 AM

From: Stevie Wilding/ESC/R3/USEPA/US  
To: Rick McMillin/R6/USEPA/US@EPA  
Cc: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Jennifer Gundersen/ESC/R3/USEPA/US@EPA  
Date: 02/29/2012 10:28 AM  
Subject: Re: Ethylene Glycol

Rick,

This is great. Right now we have an ethylene glycol RLs at 10 ppm with the labs reporting down to their MDL (around 1-5ppm).

The table below is the list we are currently analyzing on our LC/MS/MS -- but we currently are unable to do ethylene glycol or propylene glycol. We get an unidentified peak in some of the samples at the same parent mass as 2-methoxyethanol. We believe this is propylene glycol. Can R6 do all of the glycols on our list including propylene and what levels can you obtain?

2-Methoxyethanol	Water	100	ug/L
2-Butoxyethanol	Water	10	ug/L
Di ethylene glycol	Water	25	ug/L
Tri ethylene glycol	Water	25	ug/L
Tetra ethylene glycol	Water	25	ug/L

Stevie Wilding, Chemist  
Environmental Science Center  
Analytical Services Branch  
(410) 305-2606

*"Our lives begin to end the day we become silent about things that matter."*  
-- Martin Luther King, Jr. --

Rick McMillinStevie, We have the column installed and ready to go. Ken Stevens is makin...02/29/2012 10:38:44 AM

From: Rick McMillin/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US  
Date: 02/29/2012 10:38 AM  
Subject: Re: Ethylene Glycol

Stevie,

We have the column installed and ready to go. Ken Stevens is making standards to run a curve. If it looks good we will be good to go. What reporting limit is needed for this test?

Rick McMillin  
Deputy Branch Chief  
Region 6 Houston Lab  
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Stevie WildingThe contract lab did analysis with GC/FID and did no confirmation analysis. ...02/27/2012 04:59:28 PM

From: Stevie Wilding/ESC/R3/USEPA/US  
To: Rick McMillin/R6/USEPA/US@EPA  
Date: 02/27/2012 04:59 PM  
Subject: Re: Ethylene Glycol

The contract lab did analysis with GC/FID and did no confirmation analysis. Detects were very low -- but we did not feel confident with the results.

Rick McMillinStevie, I would like to help. However, timing isn't good for us, we have Nick o...02/27/2012 04:37:15 PM

From: Rick McMillin/R6/USEPA/US  
To: Stevie Wilding/ESC/R3/USEPA/US  
Date: 02/27/2012 04:37 PM  
Subject: Re: Ethylene Glycol

Stevie,

I would like to help. However, timing isn't good for us, we have Nick out this week and Diane isn't back for a couple of weeks. However, I have one chemist who might have time to get the method back up and try out ethylene glycol, but he is out for the day. I will talk to him in the morning and see what we can do. Any ideas why the contract lab didn't provide useful data? Reporting limit too low or bad QC?

Rick McMillin  
Deputy Branch Chief  
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Stevie WildingRick, We have another round of sampling to occur for 4 homes in Dimock nex...02/27/2012 03:17:42 PM

From: Stevie Wilding/ESC/R3/USEPA/US  
To: Rick McMillin/R6/USEPA/US@EPA  
Date: 02/27/2012 03:17 PM  
Subject: Re: Ethylene Glycol

Rick,

We have another round of sampling to occur for 4 homes in Dimock next week. Sorry for the late notice -- but the contracted results for ethylene glycol did not provide useful data. So I wanted to ask again if Region 6 can or would be willing to provide support for this analysis. The number of samples is should be about 10 -- but could go up to and continue into the following week.

Stevie Wilding, Chemist  
Environmental Science Center  
Analytical Services Branch  
(410) 305-2606

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-- Martin Luther King, Jr. --

Rick McMillin	Thanks Stevie, We really want to help and feel bad about the circumstances. ...	01/19/2012 04:39:34 PM
From:	Rick McMillin/R6/USEPA/US	
To:	Stevie Wilding/ESC/R3/USEPA/US	
Date:	01/19/2012 04:39 PM	
Subject:	Re: Ethylene Glycol	

Thanks Stevie,

We really want to help and feel bad about the circumstances. If there is some other way we can be of assistance please let us know.

Rick McMillin  
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Stevie Wilding	Rick, Thanks for the update. Given the urgency of this sampling event -- we...	01/19/2012 03:33:07 PM
From:	Stevie Wilding/ESC/R3/USEPA/US	
To:	Rick McMillin/R6/USEPA/US@EPA	
Cc:	Adam Molnar/ESC/R3/USEPA/US@EPA	
Date:	01/19/2012 03:33 PM	
Subject:	Re: Ethylene Glycol	

Rick,

Thanks for the update. Given the urgency of this sampling event -- we will probably contract this out.

Stevie

Rick McMillin	Stevie, My boss David Neleigh asked me to contact you about the ethylene gl...	01/19/2012 04:23:57 PM
From:	Rick McMillin/R6/USEPA/US	
To:	Stevie Wilding/ESC/R3/USEPA/US	
Date:	01/19/2012 04:23 PM	
Subject:	Ethylene Glycol	

Stevie,

My boss David Neleigh asked me to contact you about the ethylene glycol samples. I will try to give you a call after I send this message in case you are still in the office.

We are willing to try to set up the method for ethylene glycol using the same method we used for propylene glycol in the Gulf Oil Spill, which was a direct inject GC/MS on a wax column. The problem is that Diane Gregg, the person who set up this method for us, is out until the middle of March and we have a large number of samples in house right now. We should be able to get the method going without her, but right now feel that the earliest we could take samples would be Feb 13th, given our current commitments. Let us know if you think that would work for you, or if we really need to look at taking more extreme measures to fit this in.

Rick McMillin  
Deputy Branch Chief  
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